

Scaled data based on original data using  
LM-79-08 Approved Method: Electrical and Photometric Measurements of Solid-  
State Lighting Products

Test Report Prepared for  
Cooper Lighting Solutions  
(formerly Eaton)

Brand: INVUE

Report Number: P139445

Luminaire Tested: **ENT-F01-LED-E1-BL2**

Issue Date: 03/03/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P139445  
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (P33644)  
Test Lab: INNOVATION CENTER-P3  
Issue Date: 03/03/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: INVUE  
Catalog Number: ENT-F01-LED-E1-BL2  
Description: ENTRI LED LUMINAIRE  
(1) LIGHTBARS WITH AccuLED OPTICS - TYPE 2  
Light Source: (7) 4000K CCT, 70 CRI LEDs  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 2260.4 lumens  
Efficiency: N/A  
Efficacy: 87.3 lumens/watt  
Luminous Opening: Rectangular (W 1' x L: 0.17' x H: 0')  
IES Classification: Type II - Short - Semi-Cutoff  
BUG Rating: B1 - U0 - G1

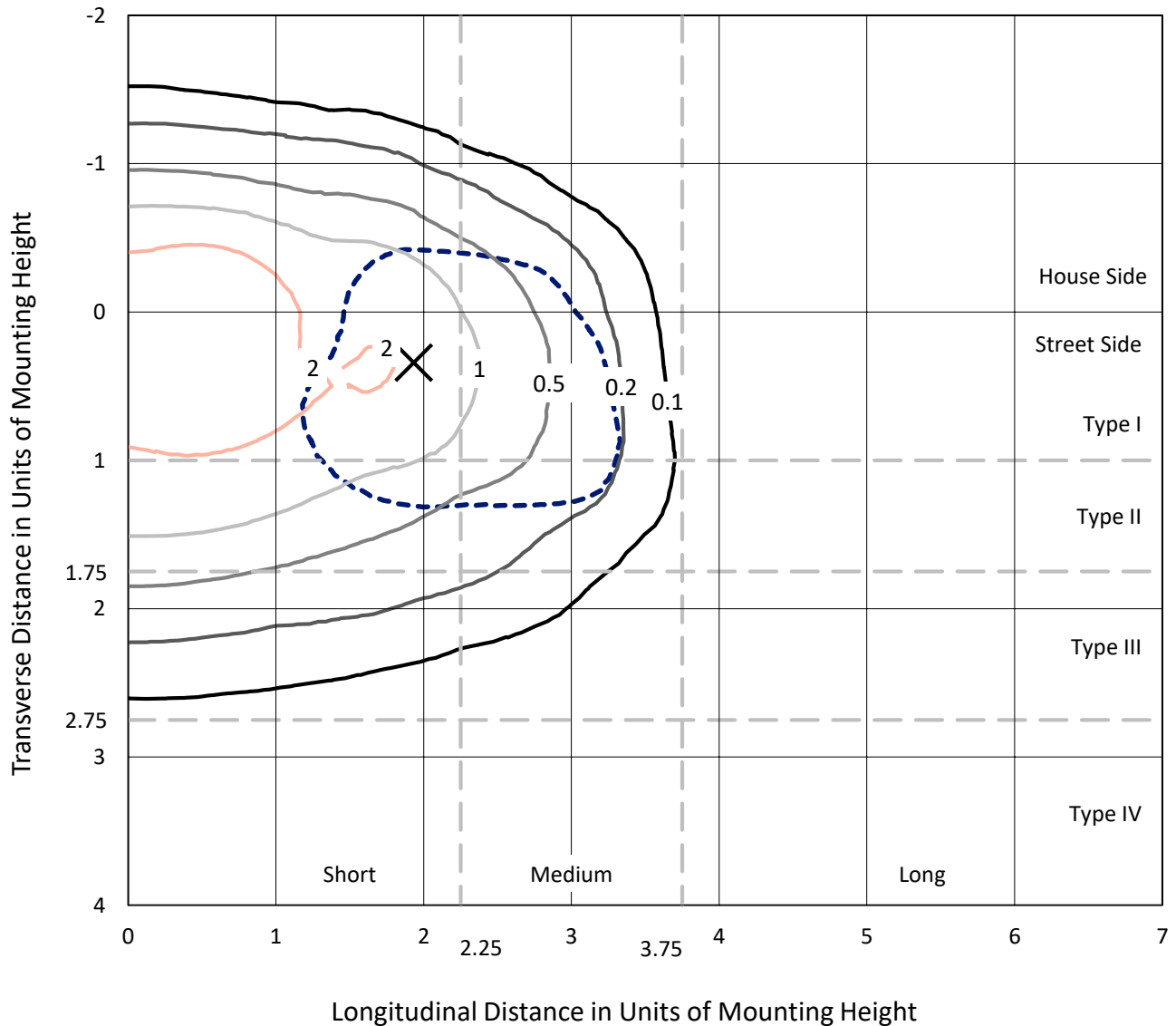
Input Watts (W): 25.9  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



REPORT NUMBER: P139445  
 CATALOG NUMBER: ENT-F01-LED-E1-BL2

### Iso-Footcandle Lines of Horizontal Illumination

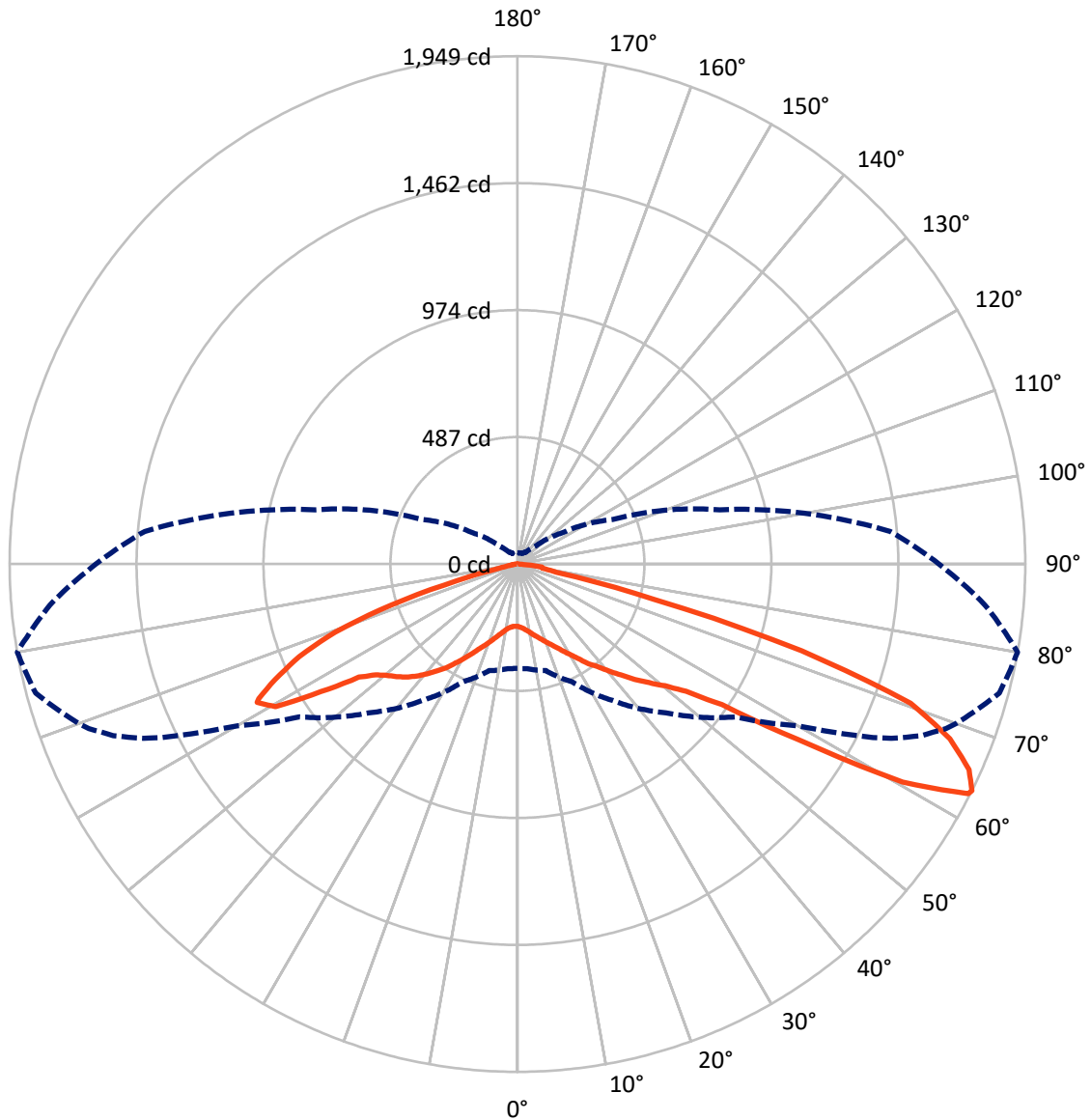
× Max cd  
 - - - 1/2 Max cd



Based on 10 foot mounting height. Maximum calculated value = 2.9 fc  
 Type II - Short - Semi-Cutoff

REPORT NUMBER: P139445  
CATALOG NUMBER: ENT-F01-LED-E1-BL2

### Luminous Intensity Polar Plot



— Vertical Plane Through 80-Deg Lateral      - - - Horizontal Cone Through 63-Deg Vertical

REPORT NUMBER: P139445

CATALOG NUMBER: ENT-F01-LED-E1-BL2

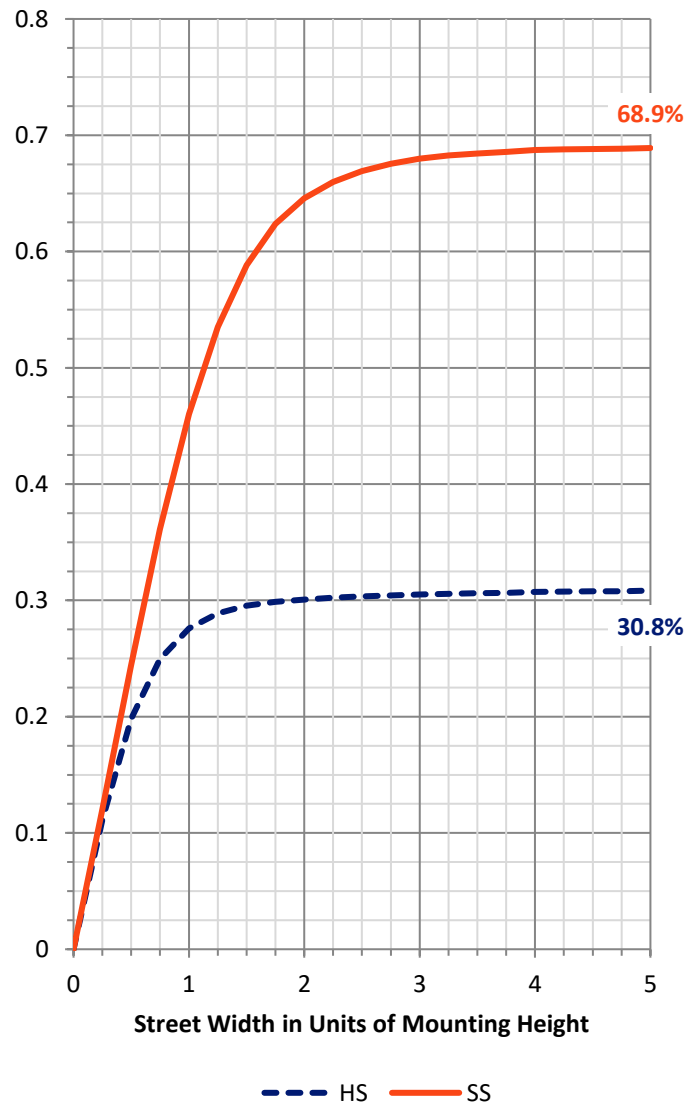
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	704.0	0.0	704.0
	% Fixture	31.1	0.0	31.1
<b>Street Side</b>	Lumens	1556.4	0.0	1556.4
	% Fixture	68.9	0.0	68.9
<b>Total</b>	Lumens	2260.4	0.0	2260.4
	% Fixture	100.0	0.0	100.0

**Coefficient of Utilization**

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	24.0	1.1
10°-20°	82.3	3.6
20°-30°	154.6	6.8
30°-40°	245.4	10.9
40°-50°	370.5	16.4
50°-60°	520.7	23.0
60°-70°	607.6	26.9
70°-80°	234.8	10.4
80°-90°	20.4	0.9
90°-100°	0.0	0.0
100°-110°	0.0	0.0
110°-120°	0.0	0.0
120°-130°	0.0	0.0
130°-140°	0.0	0.0
140°-150°	0.0	0.0
150°-160°	0.0	0.0
160°-170°	0.0	0.0
170°-180°	0.0	0.0
0°-90°	2260.4	100.0
0°-180°	2260.4	100.0



REPORT NUMBER: P139445

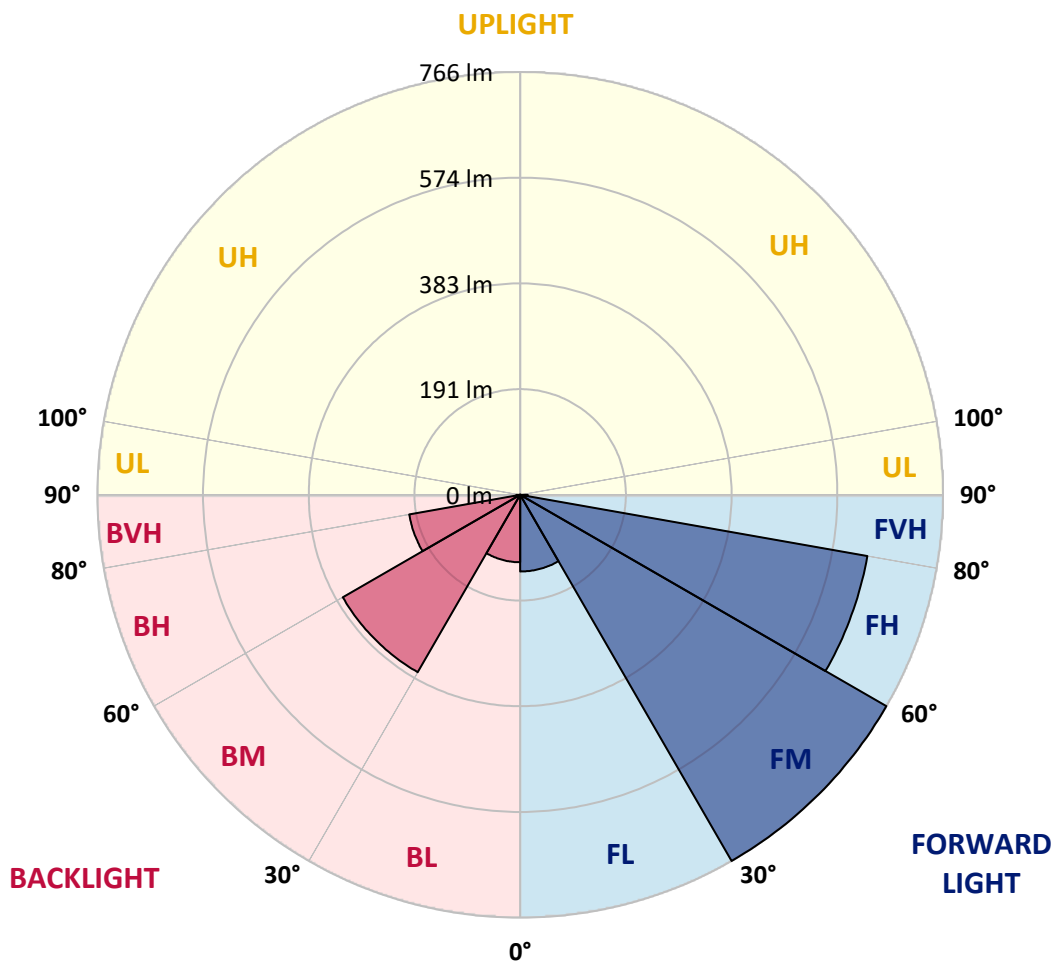
CATALOG NUMBER: ENT-F01-LED-E1-BL2

**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	138.8	6.1			
FM (30°-60°)	765.7	33.9			
FH (60°-80°)	638.3	28.2			G0/660
FVH (80°-90°)	13.6	0.6			G1/100
BL (0°-30°)	122.1	5.4	B1/500		
BM (30°-60°)	371.0	16.4	B1/1000		
BH (60°-80°)	204.1	9.0	B1/500		G1/500
BVH (80°-90°)	6.8	0.3			G0/10
UL (90°-100°)	0.0	0.0		U0/0	
UH (100°-180°)	0.0	0.0		U0/0	

**BUG Rating: B1-U0-G1**

Type II Short





REPORT NUMBER: P139445

CATALOG NUMBER: ENT-F01-LED-E1-BL2

**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	45°	55°	60°	61°	62°	64°
0°	239.4	239.4	239.4	239.4	239.4	239.4	239.4	239.4	239.4	239.4	239.4
2.5°	251.4	250.5	251.0	250.5	250.5	249.7	247.2	247.2	246.8	247.2	246.4
5°	265.0	264.6	264.2	263.3	263.3	261.7	257.6	256.7	257.2	256.3	254.7
7.5°	280.3	279.9	279.0	277.4	276.6	274.1	268.3	267.5	267.1	266.2	265.0
10°	295.5	295.1	293.9	291.8	289.8	286.0	280.3	278.2	277.8	277.4	276.1
12.5°	311.2	310.0	310.4	306.7	303.4	298.8	292.2	290.2	289.8	289.3	288.9
15°	328.6	328.1	327.3	322.4	316.2	310.0	303.4	300.9	299.3	299.7	299.3
17.5°	345.1	344.7	341.8	334.8	326.5	319.5	311.2	309.6	309.6	309.2	309.2
20°	357.0	356.6	353.7	345.1	334.3	326.5	319.9	319.9	319.5	319.9	320.3
22.5°	362.4	362.4	358.7	349.2	337.6	331.9	329.8	331.0	331.4	331.9	332.7
25°	364.5	364.5	360.8	349.6	338.9	339.7	342.2	344.2	345.1	345.1	348.0
27.5°	368.2	368.6	363.6	351.7	343.0	350.8	357.0	359.9	361.2	362.0	365.7
30°	379.3	378.9	374.8	362.0	355.4	366.5	377.7	380.6	383.5	383.5	387.6
32.5°	395.8	395.4	392.9	383.0	380.2	394.2	404.1	410.3	409.9	410.7	413.6
35°	417.7	418.1	419.8	417.3	419.8	433.8	445.0	447.4	447.8	448.3	448.7
37.5°	442.5	442.9	452.0	459.8	471.0	491.6	498.2	499.4	496.6	496.6	495.7
40°	461.1	463.1	483.3	504.0	527.5	555.6	565.5	563.0	560.9	559.3	554.3
42.5°	499.0	500.3	521.7	551.5	584.5	623.3	640.6	632.4	631.9	624.5	620.8
45°	537.0	540.3	563.4	596.9	636.5	690.1	715.7	708.7	707.5	704.2	693.9
47.5°	567.1	571.7	597.3	636.9	682.3	744.2	790.0	795.0	792.1	788.4	780.1
50°	592.7	596.4	622.4	665.8	717.8	785.5	851.1	868.9	871.3	869.7	867.6
52.5°	609.2	613.0	638.5	684.8	738.4	816.0	896.5	931.6	939.0	938.6	947.3
55°	609.7	613.8	640.2	691.0	750.0	837.1	938.6	993.9	1003.0	1014.2	1032.7
57.5°	586.9	591.1	624.1	682.7	753.3	853.6	979.5	1076.9	1101.7	1123.5	1174.7
60°	523.8	525.4	561.8	640.2	737.6	849.9	1010.4	1148.3	1183.4	1230.9	1313.4
62.5°	426.8	430.1	452.4	528.7	664.5	817.3	1022.8	1228.0	1285.8	1355.1	1487.2
63°	400.0	402.9	423.5	499.0	639.8	807.0	1022.4	1240.8	1304.3	1375.7	1518.1
65°	308.7	309.6	324.8	381.8	525.0	731.8	1000.1	1222.6	1303.1	1386.5	1535.9
67.5°	248.9	251.8	267.1	307.1	414.8	614.6	900.2	1059.1	1114.0	1196.2	1374.1
70°	194.8	199.8	214.2	259.6	353.7	494.9	757.4	884.1	918.0	957.2	1108.3
72.5°	128.8	130.0	132.5	157.7	246.8	385.1	630.3	716.6	729.8	757.8	831.7
75°	60.7	65.2	68.9	81.7	119.3	252.2	456.9	508.9	524.6	553.9	580.8
77.5°	26.4	26.0	27.7	37.6	62.7	112.3	284.4	376.0	381.4	374.8	363.2
80°	8.3	8.7	9.1	9.9	19.8	53.7	123.0	252.6	279.0	296.8	291.8
82.5°	0.8	0.4	1.2	2.5	4.1	7.8	46.2	118.5	149.0	182.9	226.2
85°	0.0	0.0	0.4	0.4	0.8	1.7	2.9	12.4	20.6	23.9	47.5
87.5°	0.0	0.0	0.4	0.4	0.8	1.2	1.2	1.7	1.7	1.7	1.7
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0



REPORT NUMBER: P139445

CATALOG NUMBER: ENT-F01-LED-E1-BL2

**CANDELA DISTRIBUTION (continued):**

	65°	66°	67°	68°	69°	70°	75°	80°	85°	90°	95°
0°	239.4	239.4	239.4	239.4	239.4	239.4	239.4	239.4	239.4	239.4	239.4
2.5°	246.0	246.0	245.2	245.6	245.2	245.2	244.4	243.5	243.1	241.1	239.8
5°	254.7	254.7	254.3	253.4	253.4	253.0	251.0	248.9	247.7	245.2	242.7
7.5°	264.6	264.2	263.3	262.5	262.5	262.1	259.2	257.2	254.7	251.0	248.1
10°	276.1	275.7	274.9	273.7	273.7	273.2	270.4	267.1	265.0	260.5	256.7
12.5°	288.5	287.3	286.9	286.0	285.2	285.2	282.7	279.4	277.8	272.8	269.1
15°	298.8	298.0	297.6	297.2	296.8	296.0	293.9	291.0	289.8	285.6	282.7
17.5°	308.7	308.7	309.2	308.3	307.9	307.1	305.9	305.0	303.8	300.1	298.4
20°	320.3	320.3	321.1	320.7	320.3	321.5	321.1	320.7	320.7	317.4	316.2
22.5°	333.9	333.5	334.8	334.3	334.8	336.0	337.6	336.8	338.5	336.4	335.6
25°	349.6	349.2	350.4	351.3	352.1	352.9	356.2	357.0	359.1	358.7	357.0
27.5°	367.4	367.8	368.2	370.2	371.5	372.3	376.9	379.3	383.5	381.8	383.5
30°	388.0	390.1	391.7	393.8	394.2	395.0	402.4	404.9	407.0	408.2	410.7
32.5°	416.5	417.7	418.1	420.6	421.4	422.7	430.5	433.8	436.7	437.1	441.7
35°	451.1	452.0	453.2	454.5	456.1	455.3	464.4	469.3	473.0	473.4	478.4
37.5°	497.0	494.1	495.3	493.7	491.2	491.2	494.1	499.0	503.2	506.5	511.4
40°	551.9	549.8	549.4	545.7	541.5	537.8	536.2	539.1	542.4	545.3	551.5
42.5°	614.6	612.5	605.5	603.0	596.0	591.9	580.8	582.0	587.8	589.4	593.1
45°	688.1	680.6	678.2	662.9	660.0	654.2	633.2	631.5	636.5	636.9	634.4
47.5°	771.9	766.5	760.7	750.0	738.8	729.4	697.2	680.2	685.6	685.2	673.2
50°	863.1	862.3	853.6	846.6	836.7	823.0	765.7	734.7	738.8	735.1	713.3
52.5°	950.2	947.7	947.3	941.9	938.2	933.7	863.9	810.7	801.2	793.3	765.3
55°	1041.8	1048.0	1043.9	1052.5	1059.1	1058.3	1029.4	951.4	903.1	896.9	854.0
57.5°	1194.5	1209.4	1229.2	1230.0	1247.8	1273.4	1325.4	1269.2	1148.3	1124.4	1067.0
60°	1369.5	1407.9	1457.5	1481.8	1519.8	1559.4	1689.8	1698.5	1529.3	1436.8	1331.6
62.5°	1545.4	1595.7	1654.4	1692.3	1739.4	1770.3	1908.2	1941.2	1786.8	1616.4	1443.0
63°	1582.5	1634.1	1684.9	1722.0	1761.7	1790.2	1914.0	1948.7	1800.9	1616.8	1436.0
65°	1601.9	1650.2	1689.8	1722.9	1749.3	1768.7	1866.5	1904.1	1782.3	1556.9	1357.2
67.5°	1454.6	1532.2	1582.1	1622.2	1649.0	1675.8	1765.8	1789.3	1703.1	1440.5	1237.5
70°	1204.0	1293.6	1372.4	1434.8	1481.0	1521.9	1616.4	1600.3	1526.0	1251.9	1049.7
72.5°	885.8	963.8	1040.6	1111.2	1171.4	1223.4	1285.8	1140.0	1027.0	832.5	726.5
75°	595.6	612.5	647.6	682.7	704.6	719.4	681.1	542.8	440.8	395.4	345.9
77.5°	351.7	340.1	341.4	332.7	326.9	325.7	273.2	151.9	80.1	81.7	85.9
80°	280.7	267.9	254.3	239.0	229.1	218.4	177.9	97.4	34.7	28.1	29.3
82.5°	227.0	223.7	216.3	200.6	184.9	166.3	127.1	93.7	19.8	15.7	16.9
85°	44.2	49.5	44.6	48.7	36.3	34.3	20.2	21.9	7.8	7.0	8.7
87.5°	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	3.3
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0





REPORT NUMBER: P139445

CATALOG NUMBER: ENT-F01-LED-E1-BL2

**CANDELA DISTRIBUTION (continued):**

	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	239.4	239.4	239.4	239.4	239.4	239.4	239.4	239.4	239.4
2.5°	237.8	236.1	234.9	233.2	232.4	231.1	230.7	229.5	229.9
5°	238.6	235.7	233.2	230.7	229.1	228.3	227.4	226.6	226.6
7.5°	242.7	239.0	236.1	233.2	232.0	230.3	229.9	228.7	228.7
10°	251.4	247.2	243.5	240.2	238.6	236.5	235.7	234.4	234.4
12.5°	264.2	260.5	256.3	251.4	248.1	245.6	243.5	242.7	242.7
15°	278.6	275.7	272.4	265.8	260.5	255.9	251.8	250.1	249.7
17.5°	296.0	293.5	290.2	282.7	274.1	264.6	257.6	254.3	253.8
20°	317.0	314.5	309.6	299.3	285.6	270.8	259.6	254.7	254.3
22.5°	338.5	338.5	330.2	313.3	293.1	273.2	258.4	251.8	250.5
25°	362.0	363.2	350.8	324.4	297.2	272.0	253.0	244.8	243.1
27.5°	390.5	389.2	368.6	333.1	297.6	267.1	244.4	234.4	232.8
30°	421.8	413.6	383.0	338.1	294.7	258.0	232.8	221.7	220.4
32.5°	453.2	435.5	393.8	338.9	286.5	244.8	217.5	206.0	204.3
35°	486.6	454.9	400.4	334.3	272.8	227.0	198.5	187.4	185.7
37.5°	514.7	469.7	402.4	322.4	252.2	206.4	181.2	169.6	166.8
40°	540.3	480.5	398.7	303.0	229.1	186.2	163.0	153.1	152.3
42.5°	563.8	485.4	385.5	277.8	206.0	168.8	147.8	138.3	137.4
45°	582.0	482.1	363.2	250.1	187.0	154.0	134.1	125.5	123.8
47.5°	593.6	470.1	332.7	227.0	171.3	138.7	119.3	110.2	108.6
50°	602.6	452.4	301.7	209.3	156.0	123.0	104.0	95.8	94.5
52.5°	614.6	429.7	274.9	193.2	138.3	105.3	88.3	80.5	79.3
55°	641.0	410.3	255.9	175.4	119.3	86.7	72.6	67.7	66.0
57.5°	730.6	416.9	243.9	154.0	97.4	69.8	60.3	57.4	57.0
60°	824.7	445.0	238.2	129.2	75.5	56.5	51.2	50.4	49.9
62.5°	819.7	419.8	214.2	101.5	58.2	46.6	44.2	44.6	44.6
63°	803.2	404.5	206.4	95.3	55.3	45.4	42.9	42.9	42.9
65°	703.3	343.0	167.6	72.2	46.2	40.5	38.4	38.8	39.2
67.5°	580.8	247.7	110.2	50.4	41.7	36.7	34.3	33.4	33.4
70°	444.1	166.8	65.2	43.8	41.3	34.3	30.1	29.3	29.3
72.5°	291.4	102.0	44.2	43.8	40.9	32.6	28.1	26.4	26.4
75°	133.7	50.4	36.7	42.1	38.8	30.1	24.8	22.7	22.3
77.5°	52.0	31.8	33.0	35.5	30.1	24.8	22.3	20.6	20.2
80°	30.1	25.6	28.9	25.6	21.9	19.0	19.0	17.7	17.3
82.5°	21.9	21.9	22.3	18.6	16.5	15.7	15.7	14.4	14.0
85°	15.7	16.1	18.6	14.9	12.8	11.1	10.3	10.3	9.9
87.5°	7.8	12.8	10.3	6.2	5.8	5.4	5.4	5.4	5.0
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)